

Appl. No.: 09/885,332  
Amdt. dated August 3, 2005  
Reply to Office action of June 8, 2004

### REMARKS

Based on the above amendments and the following remarks, applicant respectfully submits that all the pending claims are in condition for allowance.

#### Status of the Claims

Claims 1-8 and 10-17 remain pending.

#### Finality is Improper

The office action of June 8, 2005 has been marked as a final office action. Applicants respectfully traverses the finality of this office action because the examiner has introduced a new ground of rejection that is neither necessitated by applicant's claim amendments nor based on information in an IDS. *See* MPEP § 706.07(a). Specifically, the scope of independent claim 1 is unchanged relative to previously pending claim 9, and moreover, the scope of independent claim 13 is entirely unchanged. Thus applicant's amendments to the claim set cannot have necessitated the new grounds of rejection for either of these claims. Nor is the new ground of rejection based on applicant's IDS. Rather, it is based on an updated search that located new art. Accordingly, applicants respectfully request that the finality of the office action be withdrawn.

#### Rejections Under 35 USC § 103

Claims 1-8 and 10-17 stand rejected under 35 USC § 103 as being unpatentable over U.S. Patent No. 5,077,697 ("Chang") in view of U.S. Patent No. 4,562,557 ("Parks"). Applicant respectfully traverses the rejections because Applicant's claims contain patentable features not taught or suggested in the cited art.

Independent claim 1 recites an internal controller "configured to determine a *phase semblance* as a function of frequency and slowness from the receiver signals" (emphasis added). The examiner particularly cites Parks 7:67-8:47 as teaching this feature. However, the cited portion discusses the determination of slowness from roots of a characteristic polynomial, and further discusses compiling such slowness determinations as a function of frequency and time. Parks does not teach or suggest the notion of phase semblance that is recited by independent claim 1. Chang discusses time-domain semblance (*see* Chang Fig. 2 and 2:21-23), but does not teach or suggest phase semblance, let alone phase semblance that is determined as a function of frequency. Therefore, Applicant respectfully submits that independent claim 1 and its dependent claims 2-8 and 10-12 are allowable over the cited art for at least this reason.

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Similarly, independent claim 13 recites, "calculating... slowness values associated with a peak *phase semblance* as a function of frequency" (emphasis added). The cited art neither teaches nor discloses this limitation. Parks fails to teach or suggest semblance of any kind, and Chang fails to teach or suggest phase semblance as recited by claim 13. For at least this reason, applicant respectfully submits that independent claim 13 and its dependent claims 14-17 are allowable over the cited art for at least this reason.

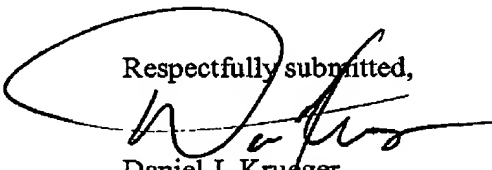
### CONCLUSION

Applicant submits that this response constitutes a complete response to all of the issues raised in the office action dated June 8, 2005.

In the course of the foregoing discussions, applicant may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the prior art which have yet to be raised, but which may be raised in the future.

If any fees are inadvertently omitted or if any additional fees are required or have been overpaid, please appropriately charge or credit those fees to Conley Rose, P.C. Deposit Account Number 03-2769/1391-24800/HDJK.

Respectfully submitted,



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